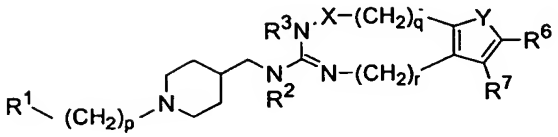
CLAIMS

1. A compound represented by the following formula (I):



(I)

[wherein R^1 represents phenyl, C_3-C_8 cycloalkyl or an aromatic heterocyclic group (having 1-3 atoms selected from the group consisting of oxygen, sulfur and nitrogen as hetero atoms),
the phenyl or aromatic heterocyclic group of R^1 may optionally fuse with a benzene ring or aromatic heterocyclic group (having 1-3 atoms selected from the group consisting of oxygen, sulfur and nitrogen as hetero atoms) to form a fused ring,
the phenyl, C_3-C_8 cycloalkyl or aromatic heterocyclic group, or fused ring, in R^1 may be unsubstituted, or substituted with one or more substituents selected from the group consisting of halogens, hydroxy, cyano, nitro, carboxyl, C_1-C_6 alkyl, C_3-C_8 cycloalkyl, C_2-C_6 alkenyl, C_1-C_6 alkoxy, C_1-C_6 alkylthio, C_3-C_5 alkylene, C_2-C_4 alkyleneoxy, C_1-C_3 alkylenedioxy, phenyl, phenoxy, phenylthio, benzyl, benzyloxy, benzoylamino, formyl, C_2-C_7 alkanoyl, C_2-C_7 alkoxycarbonyl, C_2-C_7 alkanoyloxy, C_2-C_7 alkanoylamino, C_1-C_6 alkylsulfonyl, C_3-C_8 (alkoxycarbonyl)methyl, amino, mono(C_1-C_6 alkyl)amino, di(C_1-C_6 alkyl)amino, carbamoyl, C_2-C_7 N-alkylcarbamoyl, C_4-C_9 N-cycloalkylcarbamoyl, N-

phenylcarbamoyl, piperidylcarbonyl, morpholinylcarbonyl, pyrrolidinylcarbonyl, piperazinylcarbonyl, N-methoxycarbamoyl, (formyl)amino and ureido, and the substituent of the phenyl, C_3-C_8 cycloalkyl or aromatic heterocyclic group, or fused ring, of R^1 may be unsubstituted, or substituted with one or more substituents selected from the group consisting of C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, phenyl, C_3-C_5 alkylene, C_3-C_8 cycloalkyl, C_3-C_8 cycloalkenyl, C_1-C_6 alkoxy, C_1-C_6 alkylthio, amino, mono(C_1-C_6 alkyl)amino, di(C_1-C_6 alkyl)amino, pyrrolidinyl, piperidyl, C_3-C_7 lactam, carbamoyl, C_2-C_7 N-alkylcarbamoyl, C_2-C_7 alkoxycarbonyl, carboxyl, hydroxy, benzoyl, cyano, trifluoromethyl, halogen and *tert*-butoxycarbonylamino,
provided that when R^1 is C_3-C_8 cycloalkyl, the substituent does not include amino, mono(C_1-C_6 alkyl)amino or di(C_1-C_6 alkyl)amino;

p represents an integer of 1-6;

R^2 and R^3 may be the same or different and each independently represents hydrogen, C_1-C_6 alkyl or phenyl, where the C_1-C_6 alkyl or phenyl group of R^2 and R^3 may be unsubstituted, or substituted with one or more substituents selected from the group consisting of halogens, hydroxy, C_1-C_6 alkyl, C_2-C_7 alkoxycarbonyl, amino, carbamoyl, carboxyl, cyano and C_1-C_6 alkoxy;

X represents -CO-, -SO_2-, -CH_2-, -CS- or a single bond;

q represents 0 or 1;

r represents 0 or 1;

Y represents -(R^4)C=C(R^5)-, -S- or -NR^8-;

R^4, R^5, R^6 and R^7 may be the same or different, and each independently represents hydrogen, a halogen, hydroxy, cyano, nitro, carboxyl, C_1-C_6 alkyl, C_3-C_8 cycloalkyl, C_2-C_6

alkenyl, C_1-C_6 alkoxy, C_1-C_6 alkylthio, C_3-C_5 alkylene, C_2-C_4 alkyleneoxy, C_1-C_3 alkylenedioxy, phenyl, phenoxy, phenylthio, phenylsulfonyl, benzyl, benzyloxy, benzoylamino, formyl, C_2-C_7 alkanoyl, C_2-C_7 alkoxycarbonyl, C_2-C_7 alkanoyloxy, C_2-C_7 alkanoylamino, C_4-C_{10} cycloalkanoylamino, C_3-C_7 alkenoylamino, C_1-C_6 alkylsulfonyl, C_1-C_6 alkylsulfonylamino, C_3-C_8 (alkoxycarbonyl)methyl, amino, mono(C_1-C_6 alkyl)amino, di(C_1-C_6 alkyl)amino, carbamoyl, C_2-C_7 N-alkylcarbamoyl, C_4-C_9 N-cycloalkylcarbamoyl, N-phenylcarbamoyl, N-(C_7-C_{12} phenylalkyl)carbamoyl, piperidylcarbonyl, morpholinylcarbonyl, pyrrolidinylcarbonyl, piperazinylcarbonyl, N-methoxycarbamoyl, sulfamoyl, C_1-C_6 N-alkylsulfamoyl, (formyl)amino, (thioformyl)amino, ureido or thioureido, where the aforementioned groups of R^4, R^5, R^6 and R^7 each may be independently unsubstituted, or substituted with one or more substituents selected from the group consisting of C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, phenyl, C_3-C_5 alkylene, C_3-C_8 cycloalkyl, C_3-C_8 cycloalkenyl, C_1-C_6 alkoxy, (C_1-C_6 alkoxy)(C_1-C_6 alkoxy), phenyl(C_1-C_6 alkoxy), C_1-C_6 alkylthio, amino, mono(C_1-C_6 alkyl)amino, di(C_1-C_6 alkyl)amino, pyrrolidinyl, piperidyl, (C_2-C_7 alkanoyl)piperidyl, C_3-C_7 lactam, carbamoyl, C_2-C_7 N-alkylcarbamoyl, C_4-C_9 N-cycloalkylcarbamoyl, N-phenylcarbamoyl, N-(C_7-C_{12} phenylalkyl)carbamoyl, C_2-C_7 alkanoylamino, C_2-C_7 alkoxycarbonyl, carboxyl, hydroxy, benzoyl, cyano, trifluoromethyl, halogens, *tert*-butoxycarbonylamino, C_1-C_6 alkylsulfonyl and heterocycles or aromatic heterocycles (where a heterocycle or aromatic heterocycle has 1-3 atoms selected from the group consisting of oxygen, sulfur and nitrogen as hetero atoms, and may be substituted with C_1-C_6 alkyl); and

R^8 represents hydrogen or C_1-C_6 alkyl,

where the C_1-C_6 alkyl group of R^8 may be unsubstituted, or substituted with one or more substituents selected from the group consisting of halogens, hydroxy, cyano, nitro, carboxyl, carbamoyl, mercapto, guanidino, C_3-C_8 cycloalkyl, C_1-C_6 alkoxy, C_1-C_6 alkylthio, phenyl (where phenyl may be substituted, or substituted with one or more substituents selected from the group consisting of halogens, hydroxy, C_1-C_6 alkyl, C_1-C_6 alkoxy and benzyloxy), phenoxy, benzyloxy, benzyloxycarbonyl, C_2-C_7 alkanoyl, C_2-C_7 alkoxycarbonyl, C_2-C_7 alkanoyloxy, C_2-C_7 alkanoylamino, C_2-C_7 N-alkylcarbamoyl, C_2-C_6 alkylsulfonyl, amino, mono(C_1-C_6 alkyl)amino, di(C_1-C_6 alkyl)amino and ureido],
a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof.

2. A compound according to claim 1, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof, wherein X in formula (I) is $-SO_2-$.

3. A compound according to claim 1, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof, wherein X in formula (I) is -CO-.

4. A compound according to claim 1, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof, wherein X in formula (I) is $-CH_2-$.

5. A compound according to claim 1, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof, wherein X in formula (I) is -CS-.

6. A compound according to claim 1, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof,

wherein X in formula (I) is a single bond.

7. A compound according to any one of claims 1 to 6, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof, wherein Y in formula (I) is $-(R^4)C=C(R^5)-$.

8. A compound according to any one of claims 1 to 6, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof, wherein Y in formula (I) is -S-.

9. A compound according to any one of claims 1 to 6, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof, wherein Y in formula (I) is $-NR^8-$.

10. A compound according to any one of claims 1 to 9, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof, wherein R^1 in formula (I) is substituted or unsubstituted phenyl.

11. A compound according to any one of claims 1 to 10, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof, wherein R^2 in formula (I) is hydrogen.

12. A compound according to any one of claims 1 to 11, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof, wherein R^3 in formula (I) is hydrogen.

13. A compound according to any one of claims 1 to 12, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof, wherein q=0 and r=0 in formula (I).

14. A compound according to any one of claims 1 to 12, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof,

wherein q=1 and r=0 in formula (I).

15. A compound according to any one of claims 1 to 12, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof, wherein q=0 and r=1 in formula (I).

16. A compound according to any one of claims 1 to 15, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof, wherein p=1 in formula (I).

17. A compound according to claim 2, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof, wherein Y is $-(R^4)C=C(R^5)-$, R^1 is substituted or unsubstituted phenyl, R^2 is hydrogen, R^3 is hydrogen, q=0, r=0 and p=1 in formula (I).

18. A compound according to claim 3, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof, wherein Y is $-(R^4)C=C(R^5)-$, R^1 is substituted or unsubstituted phenyl, R^2 is hydrogen, R^3 is hydrogen, q=0, r=0 and p=1 in formula (I).

19. A compound according to claim 4, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof, wherein Y is $-(R^4)C=C(R^5)-$, R^1 is substituted or unsubstituted phenyl, R^2 is hydrogen, R^3 is hydrogen, q=0, r=0 and p=1 in formula (I).

20. A compound according to claim 6, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof, wherein Y is $-(R^4)C=C(R^5)-$, R^1 is substituted or unsubstituted phenyl, R^2 is hydrogen, R^3 is hydrogen, q=0, r=0 and p=1 in formula (I)

21. A compound according to any one of claims 17 to 20, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof, wherein R^4 and R^5 in formula (I) may be the same or different and each is independently hydrogen, a halogen, hydroxy, cyano, nitro, carboxyl, C_1-C_6 alkyl, C_1-C_6 alkoxy, C_2-C_7 alkoxycarbonyl, C_2-C_7 alkanoylamino, C_1-C_6 alkylsulfonyl, amino, carbamoyl, C_2-C_7 N-alkylcarbamoyl, sulfamoyl or C_1-C_6 N-alkylsulfamoyl.

22. A compound according to any one of claims 17 to 20, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof, wherein R^4 and R^5 in formula (I) may be the same or different and each is independently a halogen, hydroxy, cyano, nitro, C_1-C_6 alkyl, C_1-C_6 alkoxy, C_2-C_7 alkoxycarbonyl, C_1-C_6 alkylsulfonyl or C_1-C_6 N-alkylsulfamoyl.

23. A compound according to any one of claims 17 to 22, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof, wherein each R^1 in formula (I) above may be the same or different and is independently hydrogen, a halogen, hydroxy, cyano, nitro, C_1-C_6 alkyl or C_1-C_6 alkoxy.

24. A pharmaceutical composition with CCR3 antagonism, which comprises as an effective ingredient thereof a compound represented by formula (I) above according to any one of claims 1 to 23, a pharmaceutically acceptable acid adduct thereof or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof.

25. A prophylactic and/or therapeutic composition for any disease associated with CCR3, which comprises as an effective ingredient thereof a compound represented by formula (I) above according to any one of claims 1 to 23, a pharmaceutically acceptable acid adduct thereof or a

pharmaceutically acceptable C_1-C_6 alkyl adduct thereof.

26. A prophylactic and/or therapeutic composition according to claim 25, wherein said disease is an allergic condition.

27. A prophylactic and/or therapeutic composition according to claim 26, wherein said allergic condition is bronchial asthma, allergic rhinitis, atopic dermatitis, urticaria, contact dermatitis or allergic conjunctivitis.

28. A prophylactic and/or therapeutic composition according to claim 25, wherein said disease is inflammatory bowel disease.

29. A prophylactic and/or therapeutic composition according to claim 25, wherein said disease is AIDS (Acquired Immune Deficiency Syndrome).

30. A prophylactic and/or therapeutic composition according to claim 25, wherein said disease is eosinophilia, eosinophilic gastroenteritis, eosinophilic enteropathy, eosinophilic fasciitis, eosinophilic granuloma, eosinophilic pustular folliculitis, eosinophilic pneumonia or eosinophilic leukemia.